

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

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ORDER NO. R6T-2011-0019

NPDES NO. CAG616002

FACT SHEET FOR

**GENERAL WASTE DISCHARGE REQUIREMENTS
AND NATIONAL POLLUANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY IN
THE LAKE TAHOE HYDROLOGIC UNIT, COUNTIES OF
ALPINE, EL DORADO, AND PLACER**

**FACT SHEET
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I. PERMIT INFORMATION

A. Background

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 lowered the permitting threshold from five acres to one acre. Further, the NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate pollutants in storm water runoff. The NPDES permit must also include additional requirements necessary to implement applicable water quality standards and general waste discharge requirements pursuant to the California Water Code.

On March 10, 2005 the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) adopted Order No. R6T-2005-0007 as the most recent general NPDES Construction Activity Storm Water General Permit for the discharge of storm water associated with construction and land disturbing activities in the Lake Tahoe Hydrologic Unit. The General Permit accompanying this Fact Sheet supersedes Order No. R6T-2005-0007, except for enforcement purposes, for the discharge of storm water runoff from construction sites.

This General Permit authorizes discharges of storm water associated with construction activity for dischargers that agree to comply with all requirements, provisions, limitations and prohibitions in the permit. This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface.

Discharges of non-storm water to land may be necessary for the completion of certain construction projects. Such discharges include, but are not limited to, irrigating vegetation for erosion control measures, pipe flushing and testing,

uncontaminated groundwater dewatering, fire hydrant flushing, and water to control dust. Such discharges to land are authorized by this General Permit as long as they (a) comply with the prohibitions established within the General Permit, (b) do not cause or contribute to a violation of any water quality standard, (c) do not violate any other provision of this General Permit, and (d) do not require a non-storm water General Permit as issued by the Lahontan Water Board.

This General Permit does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control storm water discharges to municipal separate storm sewer systems (MS4s) or other watercourses within their jurisdiction.

Dischargers of storm water runoff to surface waters of the United States are currently regulated by Order No. R6T-2005-0007, which was adopted on March 10, 2005 and expired on March 10, 2010. The terms and conditions of the Order No. R6T-2005-0007 have been automatically continued and remain in effect until new waste discharge requirements (WDRs) and NPDES permit are adopted pursuant to this Order.

II. CONDITIONS FOR PERMIT COVERAGE AND NOTIFICATION REQUIREMENTS

A. Legally Responsible Person (LRP)

The application requirements of the General Permit establish a mechanism to clearly identify the responsible parties, locations, and scope of operations of dischargers covered by the General Permit and to document the discharger's knowledge of the General Permit's requirements. To obtain coverage, the legally responsible person (LRP) or the LRP's Approved Signatory must certify and file Permit Registration Documents (PRDs) prior to the commencement of construction activity. A detailed explanation of the LRP and Approved Signatory is provided in Attachment B (Glossary) of this General Permit

B. Permit Effective Date

This General Permit is effective April 14, 2011 and provides a process for covering new dischargers and those previously covered under R6T-2005-0007 whose projects are eligible to continue under this General Permit. All dischargers requiring coverage under this General Permit on or after April 14, 2011, must file the required PRDs and filing fee, and prior to commencing land disturbing activities, must receive a written Notice of Applicability (NOA) from the Lahontan Water Board indicating the date that the permit coverage begins under the General Permit and the Waste Discharge Identification (WDID) code issued for the project.

Previously covered dischargers subject to General Permit No. R6T-2005-0007 will continue coverage under, and must comply with General Permit No. R6T-2005-0007 until a notice of termination for the project is processed, continuing coverage is granted under this General Permit, or December 1, 2011, whichever comes first. Previously covered dischargers that plan to continue land disturbing construction activities and permit coverage beyond December 1, 2011 will be notified of requirements to re-register in accordance with this General Permit on or before September 1, 2011. This will allow the PRDs to be processed and require dischargers to winterize construction sites by October 15, 2011 in accordance with the new requirements of the updated Tahoe CGP. On and after December 1, 2011, General Permit No R6T-2005-0007 is rescinded and all coverage under General Permit No. R6T-2005-0007 is terminated. Previously enrolled dischargers failing to file PRDs or other information required to complete an application to renew coverage under this General Permit will lose permit coverage on December 1, 2011.

C. Registration Process

To obtain coverage, the LRP or Approved Signatory must file Permit Registration Documents (PRDs) and receive written approval by the Lahontan Water Board prior to the commencement of construction activity. Failure to obtain coverage under this General Permit for storm water discharges to waters of the United States is a violation of the CWA and the California Water Code. The LRP must electronically submit the PRDs, which include an NOI, Storm Water Pollution Prevention Plan (SWPPP), and other documents required by this General Permit, if applicable, and mail the appropriate filing fee to the State Water Resources Control Board (State Water Board) before starting construction activities. PRDs must be filed through the State Water Board's Storm Water Multi-Application and Report Tracking System (SMARTS).

Upon receipt of the appropriate PRDs, Lahontan Water Board staff has 30 days to review the documents for completeness. If determined to be incomplete, a notice will be provided to the applicant with the reasons why the determination was made. Upon approval, a written Notice of Applicability (NOA) and WDID will be generated in the SMARTS.

D. General Permit Coverage

This Order serves as a general NPDES Permit for discharges of storm water to surface waters and authorized non-storm water discharges to land associated with construction activity that results in land disturbances equal to or greater than one acre in the Lake Tahoe Hydrologic Unit,

1. Activities covered under this General Permit include:

- a.** Any construction or demolition activity, including, but not limited to clearing, grading, grubbing, or excavation, or any other activity that results in land disturbance of equal to or greater than one acre.
 - b.** Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale that disturbs one or more acres.
 - c.** Construction activity that results in land disturbance of equal to or greater than one acre related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.
 - d.** Construction activity that results in land disturbance of equal to or greater than one acre associated with linear underground/overhead utility projects including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.
 - e.** Discharges of sediment from construction activities that results in land disturbance of equal to or greater than one acre associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.¹
- 2.** Activities specifically not covered under this General Permit include:
- a.** Disturbance to land of municipal facilities under an approved Storm Water Management Program for routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.
 - b.** Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.

¹ Pursuant to the Ninth Circuit Court of Appeals' decision in NRDC v. EPA (9th Cir. 2008) 526 F.3d 591, and subsequent denial of the USEPA's petition for reconsideration in November 2008, oil and gas construction activities discharging storm water contaminated only with sediment are no longer exempt from the NPDES program.

- c. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a federal permit.
- d. Construction activity that disturbs less than one acre of land surface, and that is not part of a larger common plan of development or the sale of one or more acres of disturbed land surface.
- e. Construction activity covered by an individual NPDES Permit for storm water discharges.
- f. Discharges of storm water identified in section 402(l)(2) of the CWA, 33 USC section 1342(l)(2).

E. Permit Termination Requirements

To terminate coverage, Dischargers must file a Notice of Termination (NOT) request, final site map, and site photographs through the SMARTS when construction is complete and final stabilization has been reached or when ownership has been transferred. The Discharger must demonstrate that the site is stabilized and does not pose any additional sediment discharge risk than the pre-construction conditions. This may be accomplished using the Revised Universal Soil Loss Equation (RUSLE) or RUSLE2 or other custom methods that account for the physical characteristics (soil and cover conditions) of the site. The purpose of this requirement is to better quantify site stabilization requirements and set measurable benchmarks for project close-out.

The Discharger must certify that all State and local requirements have been met in accordance with this General Permit and demonstrate compliance with the stabilization and post-construction standards set forth in this General Permit. The Discharger is responsible for all compliance issues including all annual fees until the NOT has been filed and approved by the Lahontan Water Board.

Upon approval, a written termination notice will be transmitted to the Discharger. If revocation of coverage under the General Permit is denied, Lahontan Water Board staff shall describe the reasons for denial in a written notification.

III. DISCHARGE PROHIBITIONS

This General Permit implements the waste discharge prohibitions contained in the Basin Plan. Unless granted an exemption in accordance with the Basin Plan, all discharges to surface waters other than storm water are prohibited. The Lahontan Water Board recognizes that certain non-storm water discharges may be necessary for the completion of construction projects. Authorized non-storm water discharges to land may include those from potable water sources such as: fire hydrant flushing, irrigation of vegetative erosion control measures, pipe flushing and testing, water to control dust, and uncontaminated ground water dewatering. Certain authorized non-

storm water discharges to surface waters may be eligible for an exemption if the project meets the requirements for a restoration project or criteria specified in Attachment F of this General Permit (exemptions for 100-year floodplains and stream environment zones). To be valid, exemptions to applicable waste discharge prohibitions must be granted in writing (e.g., in a NOA).

Non-storm water discharges may include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural as well as non-structural BMPs.

IV. EFFLUENT LIMITATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR section 122.44 requires that industrial non-municipal discharges that contain non-conventional and/or toxic pollutants regulated under the NPDES permit program comply with technology-based effluent limits. Both technology-based and WQBELs must be considered, and more stringent WQBELs must be developed if the technology-based effluent limits are not sufficient to meet water quality objectives. WQBELs for discharges authorized by this General Permit were developed to ensure protection of the beneficial uses of receiving waters in the Basin Plan.

A. Technology-Based Effluent Limitations

The CWA requires technology-based effluent limitations to be established based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

On December 1, 2009 the USEPA published final regulations establishing technology-based ELGs and NSPS for the Construction and Development point source category. 40 CFR Part 450 establishes technology-based effluent limitations based BPT, BAT, BCT, and NSPS. For BPT and BCT, the ELGs establish requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and outlet requirements. For BAT and NSPS, the ELGs require all dischargers disturbing 20 or more acres of land at one time, achieve a daily maximum turbidity of 280 NTU for all discharges by August 2, 2010. By February 2, 2014, the turbidity ELG will apply to construction sites involving land disturbance of 10 acres or more. In addition, BAT and NSPS include the same requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets as BPT and BCT.

Table 5.6-1 of the Basin Plan establishes effluent limitations for discharges of storm water to surface waters and municipal separate storm sewer systems, or MS4s, which are termed “collection” systems in the Basin Plan. Order No. R6T-2005-0007 established effluent limitations, consistent with Table 5.6-1 of the

Basin Plan for discharges to land treatment systems, collection systems and surface water. Effluent limitations contained in Table 5.6-1 of the Basin Plan, and established in Order No. R6T-2005-0007, are summarized below:

Table FS-1. Basin Plan Storm Water Effluent Limitations

Parameter	Units	Maximum Concentration for Discharge to:	
		Land Treatment Systems	Collection Systems and Surface Waters
Total Nitrogen (as N)	mg/L	5	0.5
Total Phosphorus (as P)	mg/L	1	0.1
Total Iron	mg/L	4	0.5
Turbidity	NTU	200	20
Grease and Oil	mg/L	40	2.0

Section 5.6 of the Basin Plan states:

“The effluent limitations at the top of Table 5.6-1 apply to storm water discharges to surface waters, and generally to surface runoff leaving a specific project site. If surface runoff enters a project site from upgradient, its quality and volume may together with the quality and volume of runoff generated onsite, affect the quality of the storm water leaving the site. Lahontan Water Board storm water permits for sites where offsite storm water enters the property will take these effects into consideration. In general, where the quality of runoff entering the site is worse than that of runoff generated on site, there should be no statistically significant increase (at a 90 percent confidence level) in pollutants in the water discharged from the site.”

1. Numeric Effluent Limitations (NELs)

The Lahontan Water Board has determined that the application of effluent limitations to land treatment systems is not appropriate for the discharge of storm water from construction activities. Due to the connectivity of storm drains and surface waters in the Lake Tahoe Hydrologic Unit, discharges from the project boundaries must meet the more stringent effluent limitations for discharges to municipal separate storm sewer systems or surface waters where effluent is discharged from the project boundaries or into surface waters, including municipal separate storm sewer systems. The NELs for discharges to surface waters implement requirements imposed under the previous permit.

Effluent limitations for land treatment systems established in a General Permit for Construction Activities are inappropriate. The effluent limitations contained in Table 5.6-1 for discharges to land treatment systems are established to ensure that the waters infiltrated into soils do not contain excessive nutrient concentrations that may not be effectively filtered out by soils and vegetation. However, these effluent limitations do not consider the

treatment efficiency or capacity of the various types of land treatment systems that may be used by dischargers under the General Permit.

Land treatment is an effective method for removing particulate nutrients and fine sediment and under some circumstances may eliminate a discharge to surface waters. Effluent limitations to land treatment systems may unduly restrict the ability of dischargers to treat runoff by this method. Removing effluent limitations to land treatment systems and focusing on effluent limitations applied at the point of discharge, is considered more effective and is consistent with State and federal anti-backsliding requirements.

The numeric effluent limitations contained in Table 5.6-1 are more stringent than those established in the federal ELGs (turbidity). Thus, numeric effluent limitations based on Table 5.6-1 of the Basin Plan have been established in the General Permit as follows:

Table FS-2. Numeric Effluent Limitations

Parameter	Units	Maximum Daily Effluent Limitations For Discharge To Surface Waters
Total Nitrogen (as N)	mg/L	0.5
Total Phosphorus (as P)	mg/L	0.1
Total Iron	mg/L	0.5
Turbidity	NTU	20
Grease and Oil	mg/L	2

Additionally, numeric benchmark levels for pH have been established because construction activities often involve materials, such as concrete, grout, and etching acids, which can affect the pH of runoff. The benchmark action level applies to pH levels not within the range between 6.0 and 9.0. Based on previous data collected and other anecdotal evidence, the Water Board recognizes that pH level in storm water runoff may fluctuate naturally depending on site characteristics. Therefore, dischargers are required to sample for pH when site conditions have the potential to affect pH. If the results do not meet the benchmark range levels, dischargers are required to investigate the cause of the pH excursion and implement corrective actions as needed. This action level is expected to protect receiving waters from changes in pH by more than 0.5, which is the receiving water objective for pH in the Lake Tahoe Hydrologic Unit.

2. Compliance Storm Event

This General Permit contains “compliance storm event” exceptions from the technology-based turbidity NEL similar to the Statewide General Permit. The rationale is that technology-based requirements are developed assuming a certain design storm (defined as the storm producing a rainfall amount for a specified BMPs capacity). Compliance thresholds are needed for storm events above and beyond the design storms assumed to determine the technology-based NELs. This General Permit establishes a compliance storm event as the equivalent rainfall in a 20-year, 1-hour storm, which is 1 inch of rainfall in a 1-hour period. This compliance storm event was chosen because it is consistent with the Basin Plan and other policies for pre- and post-construction BMP requirements.

3. Best Management Practices

Construction activity may result in the discharge of pollutants to receiving waters through storm water runoff and additional dry weather flows. These discharges can be minimized through best management practices and other pollution prevention measure that reduce dry weather discharges, reduce erosion, retain sediment, and minimize contact of materials with storm water.

Consistent with 40 CFR 122.44(k)(4), Order No. R6T-2005-0007 established BMPs and the requirement to develop and implement a SWPPP. This General Permit carries over the requirements to implement BMPs and a SWPPP. Additional BMPs have been established in the General Permit to be consistent with the requirements found in 40 CFR 450 for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets.

This General Permit also establishes requirements for a Rain Event Action Plan (REAP), which establishes requirements to protect all exposed portions of sites within 24 hours prior to any likely precipitation event. The requirements for the REAP have been modified and established after considering the requirements of the Statewide General Permit.

B. Water Quality-Based Effluent Limitations (WQBELs)

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard,

including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies.

1. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses of surface waters within the Lake Tahoe Hydrologic Unit include MUN, AGR, GWR, FRSH, REC-1, REC-2, COLD, SPWN, COMM, WILD, WQE, FLD, NAV, BIOL, RARE, and MIGR.

The Basin Plan includes both narrative and numeric water quality objectives applicable to receiving waters in the Lake Tahoe Hydrologic Unit. In addition, priority pollutant water quality criteria in the California Toxic Rule (CTR) are applicable to receiving waters in the Lake Tahoe Hydrologic Unit.

2. Determining the Need for WQBELs

Typical pollutants expected in discharges of storm water runoff from construction activities include nutrients, sediments, and petroleum products. As discussed above, Chapter 5.6 of the Basin Plan establishes effluent limitations to be implemented in storm water permits for total nitrogen, total phosphate (as total phosphorus), total iron, turbidity, and grease and oil. These parameters serve as indicator parameters to ensure water quality standards for biostimulatory substances, clarity, oil and grease, sediment, settleable materials, suspended materials, suspended sediment, transparency, and turbidity are not exceeded in the receiving water. Order No. R6T-2005-0007 established effluent limitations for total nitrogen, total phosphate (as total phosphorus), total iron, turbidity, and grease and oil based on the requirements of Chapter 5.6 of the Basin Plan. These effluent limitations have been carried over and serve as both water quality-based effluent limitations as well as technology-based effluent limitations.

Table 5.1-3 (summarized in Attachment G) of the Basin Plan establishes water quality objectives for total nitrogen, total phosphorus, and total iron for some water bodies that may be more stringent than the effluent limitations

established in Section 5.6 of the Basin Plan. In addition, Table 5.1-3 establishes effluent limitations for boron, chloride, sulfate, and total dissolved solids that are applicable to certain water bodies in the Lake Tahoe Hydrologic Unit. Order No. R6T-2005-0007 established the water quality objectives in Table 5.1-3 as receiving water limitations. The Lahontan Water Board found that the effluent limitations established in Section 5.6 of the Basin Plan, and receiving water limitations based on the water quality objectives established on Table 5.1-3 of the Basin Plan were protective of water quality. As such, this General Permit carries over these receiving water limitations.

Due to the presence of portable sanitation devices (porta-potties), the synergistic effects of unknown pollutants in storm water runoff, and the potential presence of toxic materials at construction sites, both bacteria and toxicity are pollutants of concern. Consistent with the water quality standards established in Section 5.1 of the Basin Plan for toxicity and coliform, Order No. R6T-2005-0007 established the narrative effluent limitation:

“All surface flows generated within the project area, or as a results of the development of the project, which are discharged to surface waters or municipal storm water collection systems shall not contain the following:

- i. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and*
- ii. Coliform organisms attributable to human wastes.”*

The narrative effluent limitation for toxicity and coliform organisms has been carried over.

Section 5.6 of the Basin Plan requires storm water permits issued by the Lahontan Water Board to take into consideration the quality of run-on from offsite areas. Order No. R6T-2005-0007 required that if pollutant concentrations of waters entering the project area exceed the numerical limitations specified above there shall be no increase in the constituent concentrations in the waters that are discharged from the project area. Consistent with section 5.6 of the Basin Plan, this requirement has been carried over.

C. Satisfaction of Anti-Backsliding Requirements

Sections 402(0)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(1) prohibit backsliding in NPDES permits. These anti-backsliding

provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R6T-2005-0007.

D. Satisfaction of Antidegradation Policy

40 CFR Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where, the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Lahontan Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

This General Permit is no less stringent than Order No. R6T-2005-0007 and does not extend the coverage of the General Permit beyond the types of dischargers previously authorized to discharge under Order No. R6T-2005-0007. The Lahontan Water Board has considered antidegradation pursuant to 40 CFR 131.12 and State Water Board Resolution No. 68-16 and finds that the subject discharges are consistent with the provisions of these policies. An antidegradation analysis is not necessary for this General Permit. Discharges not consistent with the provisions of these policies and regulations are not covered by this General Permit.

E. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on total nitrogen, total phosphorus, total iron, turbidity, and grease and oil. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

1. All surface flows generated within the project site that discharge to surface waters or municipal storm sewer collection systems shall not contain constituents in excess of the following concentrations:

Table FS-3. Summary of Final Effluent Limitations

Parameter	Units	Maximum Daily Effluent Limitations For Discharge To Surface Waters
Total Nitrogen (as N)	mg/L	0.5
Total Phosphorus (as P)	mg/L	0.1

Parameter	Units	Maximum Daily Effluent Limitations For Discharge To Surface Waters
Total Iron	mg/L	0.5
Turbidity	NTU	20*
Grease and Oil	mg/L	2
Note* - For ATS: 10 NTU for daily flow-weighted average and 20 NTU for any single sample.		

2. If constituent concentrations of waters entering the project area exceed the numerical limitations specified above, there shall be no increase in the constituent concentrations in the waters that are discharged from the project area.
3. All surface flows generated within the project area, or as a result of the development of the project that are discharged to surface waters or municipal storm water collection systems shall not contain the following:
 - a. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and
 - b. Coliform organisms attributable to human wastes.

V. RECEIVING WATER LIMITATIONS

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Lahontan Region as well as site-specific objectives for certain waters within the Lake Tahoe Hydrologic Unit. The Basin Plan also includes an objective to maintain the high quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16 (Anti-Degradation Policy). Surface water limitations in this General Permit are included to ensure protection of background water quality and beneficial uses of the receiving water.

VI. TRAINING QUALIFICATIONS AND CERTIFICATION

USEPA suggests that qualified personnel prepare SWPPPs and points to numerous states that require certified professionals to be on construction sites at all times. States that currently have certification programs are California, Washington, Georgia, Florida, Delaware, Maryland, and New Jersey. Order No. R6T-2005-0007 requires that personnel implementing the Storm Water Pollution Prevention Plan (SWPPP) be trained on the appropriate procedures. However, it does not specify any training criteria for SWPPP developers nor is there a specific curriculum or certification program required by the Order. This has resulted in inconsistent implementation by all affected parties - the dischargers, the local governments

where the construction activity occurs, and the regulators enforcing Order No. R6T-2005-0007.

This General Permit requires that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer (QSD) and that a Qualified SWPPP Practitioner (QSP) is responsible for implementing the SWPPP. A QSD must possess one of the certifications and or registrations specified in this General Permit. A QSP must possess one of the certifications and or registrations specified in this General Permit by **April 13, 2012**. Table FS-4 provides an overview of the criteria used in determining qualified certification titles for a QSD and QSP.

Additionally, the QSD/P, effective **April 13, 2012**, must have attended a State Water Board-sponsored or approved Qualified SWPPP Developer training course and pass the associated examination. The State Water Board has entered into a Memorandum of Understanding with the California Stormwater Quality Association (CASQA) to implement the training and certification program. Specific information on training and educational classes is accessible at:

<http://www.casqa.org/TrainingandEducation/tabid/201/Default.aspx>.

Table FS-4. Qualified SWPPP Developer/ Qualified SWPPP Practitioner Certification Criteria

Certification/ Title	Registered By	QSD/QSP	Certification Criteria
Professional Civil Engineer	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Geologist or Engineering Geologist	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Landscape Architect	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Hydrologist	American Institute of Hydrology	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Certified Professional in Erosion and Sediment Control™ (CPESC)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Inspector of Sediment and Erosion Control™ (CISEC)	Certified Inspector of Sediment and Erosion Control, Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Erosion, Sediment and Storm Water Inspector™ (CESSWI)	Enviro Cert International Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Professional in Storm Water Quality™ (CPSWQ)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Professional in Erosion and Sediment Control	National Institute for Certification in Engineering Technologies (NICET)	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites

VII. BEST MANAGEMENT PRACTICES

Consistent with 40 CFR 122.44(k)(4), dischargers are required to implement specific BMPs to control or abate the discharge of pollutants that are likely to be present in storm water runoff from construction sites. In addition, 40 CFR 122.45 establishes BMP requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets as BPT and BCT. This General Permit establishes minimum BMPs to be implemented by dischargers, based on Order No. R6T-2005-0007, the Statewide General Permit, and the requirements of 40 CFR 122.45.

A. Site Management

Proper handling and managing of construction materials and controlling the limits of land disturbing activities can help minimize threats to water quality. The discharger must consider appropriate site management measures for construction materials and other potential pollutant sources, waste management, vehicle storage and maintenance, landscape materials, vehicle access routes, and construction limits.

B. Sediment and Erosion Control

Sediment control BMPs should be used in combination with erosion controls as a means of preventing storm water contamination. The discharger is required to consider perimeter control measures such as installing silt fences or placing straw wattles below slopes, installing drain inlet protection, installing temporary check dams in flow lines, and constructing sediment basins to capture and treat runoff.

The best way to minimize the risk of creating pollution problems during construction is to prevent erosion at the source. The discharger is required to implement effective erosion control measures in combination with appropriate sediment control measures such as preserving existing vegetation where feasible, limiting disturbance, and stabilizing and re-vegetating disturbed areas as soon as possible after grading or construction activities. Particular attention must be paid to large, mass-graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great and where there is potential for significant sediment discharge from the site to surface waters. Until permanent vegetation is established, temporary soil stabilization is the most cost-effective and expeditious method to protect soil particles from detachment and transport by rainfall. The discharger is required to consider measures such as covering disturbed areas with mulch, applying temporary seeding, and using soil stabilizers, binders, or blankets. These erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed.

Inappropriate management of run-on and runoff can increase erosion and result in excessive physical impacts to receiving waters from sediment and increased flows. The discharger is required to manage all run-on and runoff from a project site. Examples include installing berms, gravel bags, or other temporary run-on and runoff diversions, and providing outlet protection at discharge points.

C. Non-Storm Water Management

Non-storm water discharges directly connected to receiving waters or the storm drain system have the potential to negatively impact water quality and are prohibited unless a prohibition exemption is granted in writing. The discharger must implement measures to control all non-storm water discharges to land during construction that are conditionally allowed under the terms of this General Permit. Examples include; properly washing vehicles in contained areas, controlling water applications when cleaning streets, and minimizing irrigation runoff. Control measures must be described in the SWPPP.

D. Dewatering

The discharge of dewatering waste to surface waters is allowed only when alternative options have been considered and deemed infeasible. When dewatering waste must be discharged to surface waters, a site-specific dewatering plan shall be prepared and accepted by the Lahontan Water Board before the discharge may commence. The plan shall be incorporated into the project SWPPP. In certain areas, a Basin Plan prohibition exemption may be required.

E. Inspection, Maintenance, and Repair

All management measures must be periodically inspected, maintained and repaired to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair is required by the General Permit.

F. Rain Event Action Plan

A Rain Event Action Plan (REAP) is a written document, specific for each rain event, that when implemented, protects all exposed portions of the site. A suggested REAP template is provided in Attachment H. The REAP requirement is designed to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures before the storm event occurs. A REAP shall be developed at least 24 hours before the day a forecast of 30 percent or greater probability of precipitation is predicted in the project area. This requirement differs from the requirements established in the

Statewide General Permit due to the nature of summer thunderstorms that typically occur in the Lake Tahoe Basin. Dischargers shall consult the National Oceanic and Atmospheric Administration (NOAA) website to determine the probability of predicted rain events in the project area. The website link is: <http://www.srh.noaa.gov/forecast>. Dischargers should be prepared to respond rapidly during periods when thunderstorm activity is predicted and monitor weather conditions for impending thunderstorms that may be localized in the project area.

G. Active Treatment System (ATS²) Requirements

Requirements in this General Permit for the use of an ATS is identical to the requirements established in the Statewide General Permit. There are instances on construction sites where traditional erosion and sediment controls do not effectively control accelerated erosion. Under such circumstances, or under circumstances where storm water discharges leaving the site may cause or contribute to an exceedance of a water quality standard, the use of an ATS may be necessary. Additionally, it may be appropriate to use an ATS when site constraints inhibit the ability to construct a correctly sized sediment basin, when clay and/or highly erosive soils are present, or when the site has very steep or long slope lengths.³

Although treatment systems have been in use in some form since the mid-1990s, the ATS industry in California is relatively young, and detailed regulatory standards have not yet been developed. Many developers are using these systems to treat storm water discharges from their construction sites and there are a number of reasons why an ATS may be necessary. The new ATS requirements set forth in this General Permit are based on those in place for small wastewater treatment systems, ATS regulations from the Central Valley Regional Water Quality Control Board (September 2005 memorandum “2005/2006 Rainy Season – Monitoring Requirements for Storm Water Treatment Systems that Utilize Chemical Additives to Enhance Sedimentation”), the Construction Storm Water Program at the State of Washington’s Department of Ecology, as well as recent advances in technology and knowledge of coagulant performance and aquatic safety. The effective design of an ATS requires a detailed survey and analysis of site conditions. With proper planning, ATS performance can provide exceptional water quality discharge and prevent significant impacts to surface water quality, even under extreme environmental conditions.

² An ATS is a treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment

³ Pitt, R., S. Clark, and D. Lake. 2006. Construction Site Erosion and Sediment Controls: Planning, Design, and Performance. DEStech Publications. Lancaster, PA. 370pp.

These systems can be very effective in reducing the sediment in storm water runoff, but the systems that use additives/polymers to enhance sedimentation also pose a potential risk to water quality (e.g., operational failure, equipment failure, additive/polymer release, etc.). The State and Lahontan Water Boards are concerned about the potential acute and chronic impacts that the polymers and other chemical additives may have on fish and aquatic organisms if released in sufficient quantities or concentrations. In addition to anecdotal evidence of polymer releases causing aquatic toxicity in California, the literature supports this concern.⁴ For example, cationic polymers have been shown to bind with the negatively charged gills of fish, resulting in mechanical suffocation.⁵ Due to the potential toxicity impacts, which may be caused by the release of additives/polymers into receiving waters, this General Permit establishes residual polymer monitoring and toxicity testing requirements for discharges from construction sites that utilize an ATS.

The primary treatment process in an ATS is coagulation/flocculation. ATSs operate on the principle that the added coagulant is bound to suspended sediment, forming floc, which is gravitationally settled in tanks or a basin, or removed by sand filters. A typical installation utilizes an injection pump upstream from the clarifier tank, basin, or sand filters, which is electronically metered to both flow rate and suspended solids level of the influent, assuring a constant dose. The coagulant mixes and reacts with the influent, forming a dense floc. The floc may be removed by gravitational setting in a clarifier tank or basin, or by filtration. Water from the clarifier tank, basin, or sand filters may be routed through cartridge(s) and/or bag filters for final polishing. Vendor-specific systems use various methods of dose control, sediment/floc removal, filtration, etc., that are detailed in project-specific documentation. The particular coagulant/flocculant to be used for a given project is determined based on the water chemistry of the site because the coagulants are specific in their reactions with various types of sediments. Appropriate selection of dosage must be carefully matched to the characteristics of each site.

ATSs are operated in two differing modes, either Batch or Flow-Through. Batch treatment can be defined as Pump-Treat-Hold-Test-Release. In Batch treatment, water is held in a basin or tank, and is not discharged until treatment is complete. Batch treatment involves holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full. In Flow-Through treatment, water is pumped into the ATS directly from the runoff collection system or storm water holding pond, where it is treated and filtered as

⁴ RomØen, K., B. Thu, and Ø. Evensen. 2002. Immersion delivery of plasmid DNA II. A study of the potentials of a chitosan based delivery system in rainbow trout (*Oncorhynchus mykiss*) fry. *Journal of Controlled Release* **85**: 215-225.

⁵ Bullock, G., V. Blazer, S. Tsukuda, and S. Summerfelt. 2000. Toxicity of acidified chitosan for cultured rainbow trout (*Oncorhynchus mykiss*). *Aquaculture* **185**:273-280.

it flows through the system, and is then directly discharged. “Flow-Through Treatment” is also referred to as Continuous treatment.”

1. Effluent Standards

This General Permit establishes NELs for discharges from construction sites that utilize an ATS. These systems lend themselves to NELs for turbidity and pH because of their known reliable treatment. Advanced systems have been in use in some form since the mid-1990s. ATSs are considered reliable, can consistently produce a discharge of less than 10 NTU, and have been used successfully at many sites in several states since 1995 to reduce turbidity to very low levels.⁶

This General Permit contains “compliance storm event” exceptions from the technology-based NELs for ATS discharges. The rationale is that technology-based requirements are developed assuming a certain design storm. For consistency with the compliance storm event for BMP performance in this General Permit, the compliance storm event for ATS use is 1 inch of rain in a 1-hour period (20-year, 1-hour storm).

2. Training

Operator training is critical to the safe and efficient operation and maintenance of the ATS, and to ensure that all State Water Board monitoring and sampling requirements are met. The General Permit requires that all ATS operators have training specific to using ATS liquid coagulants.

H. Post-Construction Standards

Post-construction standards in this General Permit are focused on reducing fine sediment and nutrient loading to Lake Tahoe and are consistent with requirements being developed under the Lake Tahoe Total Maximum Daily Load (TMDL) program. For municipal and public roadway storm water treatment facilities, each municipal jurisdiction and state highway departments must meet the requirements set forth in its respective municipal NPDES storm water permit.

⁶ Currier, B., G. Minton, R. Pitt, L. Roesner, K. Schiff, M. Stenstrom, E. Strassler, and E. Strecker. 2006. The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities.

For new development, re-development, and existing development BMP retrofit projects, dischargers shall consider opportunities to infiltrate stormwater runoff from impervious surfaces. At a minimum, permanent stormwater infiltration facilities must be designed and constructed to infiltrate runoff generated by the 20 year, 1-hour storm, which equates to approximately one inch of runoff over all impervious surfaces during a 1-hour period, or must meet the alternative requirements described below. Where conditions permit, project proponents should consider designing infiltration facilities to accommodate runoff volumes in excess of the 20 year, 1-hour storm to provide additional stormwater treatment.

Infiltrating runoff volumes generated by the 20-year, 1-hour storm may not be possible in some locations due to shallow depth to seasonal groundwater levels, unfavorable soil conditions, or other site constraints such as existing infrastructure or rock outcroppings. In the event that site conditions do not provide opportunities to infiltrate the runoff volume generated by a 20 year, 1-hour storm, project proponents must either (1) provide information showing how treatment facilities are expected to meet the numeric effluent limits in the Basin Plan, or (2) document written acceptance by the local municipality or state highway department that shared stormwater treatment facilities treating private property discharges and public right-of-way stormwater are sufficient to meet the municipality's average annual fine sediment and nutrient load reduction requirements.

Runoff from parking lots, retail and commercial fueling stations, and other similar land uses may contain oil, grease, and other hydrocarbon pollutants. Project proponents designing treatment facilities for these areas must include pre-treatment devices to remove hydrocarbon pollutants prior to infiltration or discharge and contingency plans to prevent spills from polluting groundwater.

VIII. STORM WATER POLLUTION PREVENTION PLAN

This General Permit establishes requirements for the development and implementation of a SWPPP to identify the sources of sediment and other pollutants that affect the quality of storm water discharges; and to describe and ensure the implementation of BMPs to minimize or eliminate sediment and other pollutants in storm water and non-storm water discharges. The conditions of SWPPP are based on previous requirements in Order No. R6T-2005-0007 and the Statewide General Permit.

This General Permit provides more detailed requirements for the content and organization of SWPPPs to be developed. A suggested outline for the SWPPP is also presented in Attachment I.

IX. MONITORING AND REPORTING PROGRAM REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Lahontan Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment C of this General Permit, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Visual Inspections

To ensure the proper implementation of BMPs and the SWPPP, and record site conditions for use in compliance determination, visual inspections of the site are required at the end of each work day during active construction periods, and at least once a month during long periods of inactivity such as the winter shut-down period. Results of inspections must be documented and maintained with the project SWPPP.

B. Storm Water Discharge Monitoring

Pursuant to the requirements of 40 CFR 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations and to assess the impacts of the discharge on the receiving water. Sampling shall be conducted at all identified discharge points in accordance with the requirements of the MRP. The MRP requires daily sampling and analysis of storm water discharge events for turbidity using calibrated portable field meters to evaluate potential impacts from land-disturbing activities.

This General Permit also requires that all dischargers develop a sampling and analysis strategy for monitoring pollutants that are not visually detectable in storm water. The sampling strategy shall be developed based on the potential pollutants to be present considering the construction materials, soil amendments, soil treatments, and historic contamination at the site. Monitoring for non-visible pollutants is required at any construction site when the exposure of construction materials occurs and where a discharge can cause or contribute to an exceedance of a water quality objective. Examples of non-visible pollutants include glyphosate (herbicides), diazinon and chlorpyrifos (pesticides), nutrients (fertilizers), and molybdenum (lubricants). The use of diazinon and chlorpyrifos is a common practice among landscaping professionals and may trigger sampling and analysis requirements if these materials come into contact with storm water. High pH values from cement and gypsum, high pH and suspended sediment concentrations from wash waters, and chemical/fecal contamination from portable toilets are also potential pollutants from construction projects.

The pH of effluent should be between 6.0 and 9.0 to ensure protection of water quality objectives set for receiving waters. This pH range is set as a numeric benchmark level that requires dischargers to investigate the cause of any excursion outside of the 6.0-9.0 pH range. The Lahontan Water Board recognizes that, in some cases, pH levels in storm water runoff may occur at levels outside of the range due to natural conditions. In these cases, dischargers must provide data to demonstrate that an excursion is due to natural conditions.

The most effective way to avoid the sampling and analysis requirements, and to ensure permit compliance, is to avoid the exposure of construction materials to precipitation and storm water runoff by implementing appropriate BMPs. However, preventing or eliminating the exposure of pollutants at construction sites is not always possible. Some materials, such as soil amendments, are designed to be used in a manner that will result in exposure to storm water. In these cases, it is important to make sure that these materials are applied according to the manufacturer's instructions and at a time when they are unlikely to be washed away.

Other construction materials can be exposed when storage, waste disposal or the application of the material is done in a manner not protective of water quality. For these situations, sampling is required unless there is capture and containment of all storm water that has been exposed. In cases where construction materials may be exposed to storm water, but the storm water is contained and is not allowed to run off the site, sampling will only be required when inspections show that the containment failed or is breached, resulting in potential exposure or discharge to receiving waters.

C. Receiving Water Monitoring

1. Surface Water

The storm water discharge sampling requirements and NELs in this General Permit are sufficiently stringent such that surface water (also called receiving water) monitoring is not necessary in most situations. The storm water monitoring requirements specified above provide the most direct opportunity for dischargers to assess site conditions and take corrective actions as necessary. The stringency of the NELs also provides a sufficient enforcement mechanism to ensure that water quality is protected. Additionally, most storm water discharges are commingled with effluent from a variety of sources before discharging to surface waters. These conditions complicate analysis of the results and make it difficult to determine the cause of any potential effects on surface water quality. Therefore, this General Permit requires surface water sampling only in certain cases when stormwater discharge sampling is infeasible and there is a direct discharge to

surface waters from overland flow. These conditions are most often encountered on stream restoration projects where grading activities are located immediately adjacent to the surface water. In these cases, the discharger is required to collect surface water samples up and downstream of the project site.

2. Bioassessments

This General Permit requires a bioassessment of receiving waters for dischargers with construction projects equal to or larger than 30 acres with direct discharges into wadeable streams. Benthic macroinvertebrate samples shall be taken upstream and downstream of the site's discharge points in the receiving water. Bioassessments measure the quality of the stream by analyzing the aquatic life present. Higher levels of appropriate aquatic species tend to indicate a healthy stream; whereas low levels of organisms can indicate stream degradation.

Active construction sites have the potential to discharge large amounts of sediment and pollutants into receiving waters. Requiring a bioassessment for large project sites, with the most potential to impact water quality, provides data regarding the health of the receiving water prior to the initiation of construction activities. Pre- and post-construction data can be used to compare the effects of the construction activity on the receiving water.

Specific requirements of bioassessments are established in Attachment C-1 and have been developed to be consistent with the requirements of the Statewide General Permit. Each ecoregion (biologically and geographically related area) in the State has a specific yearly peak time where stream biota is in a stable and abundant state. This time of year is called an Index Period and is from July 1 through August 15 in the Lake Tahoe Hydrologic Unit. The bioassessment requirements specify that benthic macroinvertebrate sampling be conducted within this index period. If pre-construction bioassessment cannot be completed within the index period, the discharger shall pay into the Surface Water Ambient Monitoring Program (SWAMP) bank account in accordance with Appendix 3 of Water Quality Order No. 2009-0009-DWQ. Bioassessment methods are required to be in accordance with the SWAMP in order to provide data consistency within the state as well as generate useable biological stream data.

D. Reporting Requirements

1. 24-Hour Reporting

Pursuant to the requirements of 40 CFR 122.41(l)(6), this General Permit requires dischargers to orally report to Lahontan Water Board staff within 24

hours whenever an adverse condition occurs as a result of this discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this General Permit, significant spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance pursuant to section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Lahontan Water Board within five (5) business days of occurrence. The written notification shall identify the adverse conditions, describe the actions necessary to remedy the condition and/or the actions implemented to abate the problem from continuing, and specify a timetable, subject to the modifications of the Lahontan Water Board, for remedial actions.

In the event that sampling results exceed any applicable NEL, the dischargers shall orally notify the Lahontan Water Board within 24 hours after the NEL exceedance has been identified and electronically submit all storm event sampling results through the SMARTS within five (5) business days after the NEL exceedance has been identified

2. Annual Report

All dischargers must prepare and electronically submit an Annual Report no later than November 30 of each year using the Storm water Multi-Application Reporting and Tracking System (SMARTS). The report shall cover the period from October 16 of the previous year through October 15 of the current year. The Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, chain-of-custody forms, corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

3. Final Report

Dischargers shall prepare a final report following completion of project construction to demonstrate that the project is completed as planned and water quality impacts have been mitigated. The discharger shall electronically submit the report through the SMARTS that describes: 1) whether the project was completed as planned in the NOI and/or any modification of the construction plans for the proposed storm water collection treatment, or disposal facilities or restoration work; 2) details any change in the amount of impervious coverage for the project site beyond what was authorized; and 3) any significant problem(s) which occurred during project construction and remedial measures planned or implemented.

4. Restoration Monitoring and Reporting

Restoration projects are often executed to improve existing water quality conditions; therefore, it is necessary to monitor restoration project effectiveness until it is self sustaining. Monitoring information can also identify project and/or construction method strengths and weaknesses. This knowledge can provide feedback into the maintenance of the existing system and also be applied to future water quality improvement projects.

This General Permit requires the discharger to submit a detailed effectiveness monitoring plan as part of the Construction Site Monitoring and Reporting Plan (CSMRP) that includes annual performance criteria for the review and acceptance by the Lahontan Water Board staff. A contingency plan must also be submitted for actions to be taken if performance criteria are not met.

Ideally, pre- and post-construction monitoring is required to best evaluate the success of the restoration project. Monitoring should include, but not be limited to, assessments of vegetative cover and water quality and quantity measurements. Where appropriate, monitoring should also include upgradient and downgradient sampling of water entering a treatment method (sediment can, sand and oil trap).

X. COMPLIANCE DETERMINATION

Order No. R6T-2005-007 was silent on how compliance with the applicable limitations was determined. This General Permit provides more detailed information on how compliance will be determined as discussed below.

A. Compliance with Effluent Limitations

As previously discussed under section V – Effluent Limitations, the technology-based turbidity NEL in this General Permit is based on the performance of a BMP assuming a certain design storm (defined as the storm producing a rainfall amount). Compliance with the NELs will not be required for storm events that exceed the equivalent rainfall in a 20-year, 1-hour storm (1 inch of rainfall in a 1-hour period). The discharger is required to provide supporting documentation (i.e., evidence of actual rainfall amount for the area, such as an on-site rain gauge and rainfall data provided by NOAA) to the Lahontan Water Board for any claims that an effluent limit exceedance occurred during a storm event exceeding a 20-year, 1-hour storm.

Additionally, NELs may not apply when run-on conditions are causing an exceedance of an NEL or when discharges do not reach surface waters. The dischargers must provide data and information to support any claim that the NELs do not apply due to these circumstances.

B. Multiple Sample Data

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). Pursuant to NPDES regulations (40CFR Part 122.2), *maximum daily discharge* limitation means the highest allowable “daily discharge.” *Daily discharge* means the “discharge of a pollutant” measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of measurement other than mass, the daily discharge is calculated as the average measurement of the pollutant over the day. For purposes of this General Permit, the daily average effluent value is defined as the arithmetic mean of the daily effluent data. When determining compliance when more than one sample result is available due to collection at multiple discharge points and/or multiple times during the calendar day, the Discharger shall compute the arithmetic mean concentration for each day of discharge.

Samples must be representative of the volume and quality of runoff from the site. Sample collection must not be manipulated in such a way as to skew the maximum daily effluent value. However, dischargers may indicate the proportional area or flow from the site that each discharge point represents and factor this into the daily average for the entire site when reporting the data.

C. Maximum Daily Effluent Limitation

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). If a daily average concentration (or when applicable, the daily median) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period.

D. Sampling by Other Parties

Sampling may be conducted by persons other than the Discharger. Water Board staff, operators of municipal separate storm sewer systems, or others may analyze storm samples. Samples collected by others may be used with other data to determine MDELs and to conduct compliance determinations, as provided above.

XI. PUBLIC PARTICIPATION

The Lahontan Water Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water from construction-related activities. This proposed General Permit has been developed for review and comment by the public. As a step in the WDR adoption process, the Lahontan Water

Board staff has developed tentative WDRs. The Lahontan Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

On January 27, 2011, the Lahontan Water Board notified dischargers, interested agencies, and other interested parties of its intent to prescribe waste discharge requirements for construction-related activities in the Lake Tahoe Hydrologic Unit, and provided them with an opportunity to submit their written comments and recommendations on the draft tentative permit by February 26, 2011. Notification was provided through mailing, list serve system emails, and posting on the Lahontan Water Board website. Lahontan Water Board staff revised the permit based on comments received on the tentative draft, and on March 11, 2011, the Lahontan Water Board notified dischargers, interested agencies, and other interested parties that a proposed permit was available for public review. Notification was provided through mailing, list serve system emails, newspaper notifications, and posting on the Lahontan Water Board website.

B. Written Comments

The staff determinations are proposed. Interested persons are invited to submit written comments concerning these proposed WDRs. Written comments must be submitted either in person, by email, or by U.S. mail to the Lahontan Water Board. The mailing address for the Lahontan Water Board is 2501 Lake Tahoe Blvd, South Lake Tahoe, CA 96150. Email comments may be submitted to the attention of Bud Amorfini at bamorfini@waterboards.ca.gov.

To be fully considered by staff and the Lahontan Water Board, written comments must be received at the Lahontan Water Board within ten days of the Public Hearing to consider adopting the updated permit. Comments received after that date will be forwarded on to the Lahontan Water Board.

C. Public Workshop

The Lahontan Water Board conducted two public workshops on February 10, 2011, to inform and discuss issues relating to the tentative WDRs with interested parties.

D. Public Hearing

The Lahontan Water Board has scheduled a public hearing to consider adopting the updated permit. The Board meeting is scheduled as follows:

Date: April 13-14, 2011
Time: TBD
Location: Lake Tahoe Community College

1 College Drive
South Lake Tahoe, CA 96150

Interested persons are invited to attend. At the public meeting, the Lahontan Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/lahontan/> where the public can access the current agenda for changes in dates and locations.

E. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Lahontan Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Lahontan Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the Lahontan Water Board at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday, at 2501 Lake Tahoe Boulevard, South Lake Tahoe, CA 96150. Copying of documents may be arranged through the Lahontan Water Board by calling (530) 542-5400.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Lahontan Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Bud Amorfini, Engineering Geologist, at 530-542-5463 or by email at Bamorfini@waterboards.ca.gov.